## MTF Formulary Management for Macrolide/Ketolide Antibiotics

Department of Defense Pharmacoeconomic Center

Uniform Formulary Decision: The Director of TMA has approved the recommendations from the 15 November 2005 DoD P&T Committee meeting regarding formulary status of macrolide/ketolide antibiotics on the Uniform Formulary (UF) and Basic Core Formulary (BCF), Conversion from non-formulary agents to an BCF or uniform formulary drug or establishment of medical necessity may commence 19 Jan 06 and must be completed by 22 Mar 06.

| Uniform Formulary (UF) Agents  |   | Non-Formulary Agents  |
|--|---|---|
| Macrolide/ketolide antibiotics<br>on BCF<br>MTFs <u>must</u> have on formulary | UF Macrolide/ketolide antibiotics<br>MTFs <u>may</u> have on formulary                            | Macrolide/ketolide<br>antibiotics MTFs <u>must not</u><br>have on formulary |
| Azithromycin (generic) 250 mg tab<br>Erythromycin (any base/salt)              | Azithromycin all other forms (excludes Zmax)<br>Clarithromycin IR/ER (generic/Biaxin XL) tab/susp | Azithromycin 2 gm (Zmax) Telithromycin 400 mg tabs                          |

- Generic azithromycin 250 mg, 500 mg, and 600 mg tablets are now available. As more generic azithromycin products are introduced into the market, prices are expected to decrease.
- To meet the BCF requirement, MTFs should choose specific erythromycin products based on local needs.
- All macrolides and telithromycin were shown to have similar cure rates and/or bacterial eradication rates for the treatment of community acquired pneumonia, acute bacterial exacerbation of chronic bronchitis, acute pharyngitis (except Zmax which has not been studied in this infection), and acute bacterial sinusitis.
- Taking into account adverse effects, pregnancy ratings, pediatric indications, and drug interaction profiles, azithromycin has the most favorable safety/tolerability profile.
- Telithromycin in-vitro shows activity against multi-drug resistant S. pneumoniae (MDRSP), but this has not translated into superior clinical cure/improvement/bacteriological eradication rates in clinical trials.
- Erythromycin has a wide variety of FDA indications and uses; however, it may have a limited role in treating many common types of upper and lower respiratory tract infections due to inactivity against H. influenzae.
- Macrolide/ketolide antibiotics designated as non-formulary (NF) are the least cost-effective agents. MTFs should only dispense NF drugs to patients who cannot be treated with BCF/UF agents. MTFs must use the medical necessity criteria established by the DoD P&T Committee. The criteria are available on the TRICARE Pharmacy website: http://www.tricare.osd.mil/pharmacy/medical-nonformulary.cfm. A Microsoft Word version of the TMOP/TRRx Medical Necessity form adaptable for MTF use is available on RxNET

| Macrolide/Ketolide Antibiotics MTF Price Comparison                                |   |                          |  |
|--|---|--------------------------|--|
| Drug & Dosage Form   | Average Cost for Typical Course of Therapy (Nov 2005) <sup>ab</sup> |                          |  |
| UF macrolide/ketolide antibiotics  | MTF Costs   | System Cost <sup>c</sup> |  |
| Azithromycin 250 mg tab  | \$25.57   | \$34.18                  |  |
| Erythromycin base/salt <sup>a</sup>  | \$1.56 - \$20.40  | \$3.54 - \$18.86         |  |
| Other UF macrolide/ketolide antibiotics available for inclusion on MTF formularies |   |                          |  |
| Clarithromycin IR Tab  | \$29.96   | \$50.53                  |  |
| Clarithromycin XL Tab  | \$29.05   | \$48.50                  |  |
| Azithromycin Susp  | \$14.23   | \$22.73                  |  |
| Clarithromycin Susp  | \$29.29   | \$42.96                  |  |
| Non-formulary macrolide/ketolide antibiotics                                       |   |                          |  |
| Azithromycin (Zmax) 2 gm   | \$31.07   | \$35.04                  |  |
| Telithromycin 400 mg tab (for tx of CAP)   | \$46.40   | \$70.39                  |  |

Post-decision prices; actual price may vary slightly due to MTF-specific Prime Vendor discounts and/or fees

## References

- For the full clinical review of the macrolide/ketolide antibiotics and for discussion about UF decisions, log onto RxNET (the PEC's webforum) www.dodrxnet.org (under "File Library" forum, "DoD P&T Library" folder).
- Current/future drug classes under review by the DoD P&T Committee: www.pec.ha.osd.mil/PT\_Committee.htm
- TRICARE website for information on the Uniform Formulary: www.tricare.osd.mil/pharmacy
- TRICARE Formulary Search Tool: www.tricareformularysearch.org

POC: For more information email: pecuf@amedd.army.mil

Updated: 18 Jan 06

Pust-decision prices, actual price may vary singing ude to min specific mine vertical discounts and need.

MTFs are prohibited from entering into any incentive pricing agreements in any form with pharmaceutical manufacturers to receive additional discounts.

System costs are the average normalized weighted daily cost across all 3 point of service.